

Pancoast (Jo.)  
Professional Glimpses Abroad.

A

LECTURE,

INTRODUCTORY TO THE COURSE

ON

ANATOMY,

IN THE

Jefferson Medical College of Philadelphia,

DELIVERED OCTOBER 17, 1856,

BY

JOSEPH PANCOAST, M. D.

Published by the Class.



PHILADELPHIA:

JOSEPH M. WILSON,

27 SOUTH TENTH STREET, BELOW CHESTNUT STREET.

1856.



*J. M. C. Hall*  
*with the Succedanea*  
*of the Author*  
Professional Glimpses Abroad.

A

LECTURE,

INTRODUCTORY TO THE COURSE

ON

ANATOMY,

IN THE

Jefferson Medical College of Philadelphia,

DELIVERED OCTOBER 17, 1856,

BY

JOSEPH PANCOAST, M. D.

Published by the Class.

18,992.

PHILADELPHIA:

JOSEPH M. WILSON,

27 SOUTH TENTH STREET, BELOW CHESTNUT STREET.

1856.





## CORRESPONDENCE.

---

Philada., Dec. 15, 1856.

Dear Sir,—We the undersigned, members of the present class of the Jefferson Medical College, having heard with much pleasure and instruction, your very able and eloquent Introductory Lecture, do most respectfully and earnestly solicit a copy of the same for publication, feeling assured that it will be read by many with interest and profit.

Hoping that it may meet your wishes to accede to our request, we remain, with sentiments of highest regard and esteem,

Very respectfully and truly,

Your obedient servants,

HUMPHREY PEAKE,	WM. SNODGRASS,
J. RICHMOND, Jr.,	E. B. P. KELLY,
JOHN S. COLEMAN,	JAMES B. DELAPLANE,
MARCUS P. STEPHENSON,	H. ORTON,
	and others.

Dr. JOSEPH PANCOAST,  
Prof. of Anatomy, Jefferson Med. College, Phila.

Phila., Dec. 17, 1856.

To Messrs. H. PEAKE, J. RICHMOND, JNO. S. COLEMAN, and others.

Gentlemen,—Your letter of the 15th inst., soliciting a copy of my introductory lecture for publication, has just reached me. Expressing, as it does, the wishes of so large a number of gentlemen in whose medical education I have the happiness to assist, it scarcely leaves me at liberty to do otherwise than accede to their request. I therefore place the manuscript at your disposal, fearful only that the lecture which was hastily prepared, may be found too discursive and sketchy in its character, to prove deserving of the high honour bestowed upon it.

Be pleased to accept, gentlemen, the assurance of my highest regard and attachment.

JOSEPH PANCOAST.



## INTRODUCTORY LECTURE.

---

IN the bewitching tales of the far East, in the wild dreams of some of the chivalrous discoverers of our own land, and in the old Fabliau de Cocaigue, we have frequent allusions to

La fontaine de Jovent.  
Que faict rejuvenir le gent:

but unhappily the existence of a fountain of rejuvenescence where the faded beauty might be enabled to restore her charms, or the man of science to renew his energies, has proved but a poet's dream. It has long been taught, however, and I believe truly, that the nearest approach to its realization, is to be found in the change of scene which travel produces.

A voyage across the broad Atlantic itself is not without its attractions, nor unattended by salutary impressions. The broad misty limitless horizon; the heaving swell or mighty wave of the mid ocean; the seeming absence in air or water of every living thing, save the little world immediately around you; the unrestrained invigorating breezes, with the occasional distant sail to remind you that yours is not the only ship on that wide expanse; the dreamy existence in which the hours move so rapidly on; the newly awakened interest with which you watch every sleeping cumulus of clouds or fleeting squall, give an undeniable and exquisite charm,

to a short sojourn in one of the floating castles of indolence with which the ocean is bridged.

One who, like myself, has for the first time visited those European lands, the homes of his progenitors, and the themes of thought from early childhood, may probably fancy that he will there find something utterly new in the sky above him, in the land and in the birds and beasts which inhabit it, and the various peoples he will meet. If so, he will probably be doomed to some disappointment. He might pass diagonally across England, and scarcely, for any striking change that he would observe, fancy that he had gone more than a day's journey from one of our large cities. He would see a smaller region, more fully crowded with fine estates, noble mansions, and magnificent cities so thickly spread, that the whole land appears, as it really is, the central capital to half the world. But he sees the same class of faces, and hears the same voices with which he has been familiar at home.

If he passes into La Belle France, he is prepared to find a change in the language and modes of life, but the features of the country will be found the same in a great degree, as he has seen in various parts of our own varied domain; save in the little hamlets, or clusters of thatched roof cottages, scattered broad-cast over the land between the larger cities, and the farm-steads reduced to almost infinitesimal minuteness.

In sunny Italy, that land where almost every thing but man is divine, in which he is taught to look for celestial glories in the skies, ethereal softness in the air, and cerulean colours in the wave, he will find the difference greatest, but yet only in degree. The skies, save in a somewhat greater depth of blue,—“the deep blue sky of Rome,” the sunsets only in slightly deeper tints,



prolonged a little farther up the great arch of heaven, are precisely those that we see so commonly in America on a fine Summer's eve, and our own beauteous lakes will rival in colour, not only the blue waters of the midland sea, but the deep azure sky itself, which is reflected upon them.

He will not find here, as there, the pale poetic olive, setting off picturesquely every hill or mountain steep, vines that yield the royal juices trained in sweeping festoons from tree to tree along every road-side, nor the rice growing side by side with the indian corn, nor the madder by the wheat; but all these we have, or ought to have, though more widely disseminated, in our own extensive and varied clime, even to the orange and the citron, and the fig, which there are but the products of walled enclosures.

But in that fair region, the traveller will suffer greatly from the molten summer sun rarely veiled with a cloud, from the perpetual dust about its great cities, which fills the avenues of sense, and is none the less disgusting from the thought, that it may possibly be the reliquiae of the old Romans whose memories still haunt every nook and corner of the land; will be hurried from the ruined sites of former glories by the demon of malaria, tortured by the insects that infest, with more than Roman obstinacy, forum and coliseum, bed-chamber and church, be driven in summer by mosquitoes from the Elysian fields of Virgil, and invaded with irrepressible thieves and beggars on the resplendent slopes of classic Baiæ.

The peculiar and beautiful scenery of Switzerland will divide the palm with Italy,—made up as it is with many a beauteous lake, and many an Alpine peak, with intervening valleys here closed with mighty glaciers

sloping for miles adown the mountain-side, and there vocal, with the mad streams which the glaciers feed, the tinkling of the cow bells, and the lowing of the herds, the dash of waterfalls, and the melancholy music of the Alpine horn, to all of which I have listened with rapture, between the crash of avalanches falling from the hoary peak of the Jungfrau.—But this is all.—The patriotic cowherds of Morat and Morgarten, and many another field that rivals Spartan story, have given place to a population without nationality, without distinction in literature and science,—a mingled race of French, Germans, and Italians.

If he wanders through Bavaria, Saxony, Prussia, or Germany, all occupied by much the same people, descendants from the old Teutonic stock, industrious and frugal, living scarcely can it be said in the country, but mostly massed in small villages, of which I could count ninety from the walls of one town,\* with their fertile harvest fields filling up all the spaces between, a people much like what we see in many parts of our own land, but imbibing there, with their beer and tobacco, a sort of passive philosophy that seems to keep them quiet, and check the spirit of constitutional freedom.—It is necessary, however, to make one grand exception in the case of Holland, that fountain place of national liberty and republican government. Here every thing seems reversed;—the towns placed below the level of the rivers; long canals through meadows in which mighty ships are drawn by horses; ditches placed on the tops of the banks into which the water is lifted by wind-mills; where the animals are driven up hill to water, and the reedy canals are so nearly on a level with the tops of the houses that the frogs might peep into the

\* Nuremberg.

swallows' nests beneath the eaves; where there are towns so fantastically neat, that neither horse nor wagon is allowed to enter, and no one can smoke without a stopper to his pipe, or enter a house without leaving his sabots at the door; where the very cows wear petticoats to protect them from the cold, are housed in winter in the same neat dwelling with their owners, their tails at night—through motives of scrupulous cleanliness—twitched up on pulleys; where sleds with greased runners take the place of wagons in the streets, and where the tongue of the carriage, which traverses their narrow banks, has no connexion with the horses, but is turned up short in front for the foot of the driver, who guides it with his heel.

But in the great cities of Europe, the intelligent American will find much that to him is strange and interesting. The massive architectural structures, ancient and modern; those glorious old cathedrals, with flying buttresses, and fretted aisles, and heaven-pointing spires—Titanic creations of an age of deep feeling that sent the famous crusades into the east—the grand libraries, and the treasured miracles of art and science;—and I envy not the man who could return from a visit to the old world, without having seen much to admire, and learned much to serve as models for imitation.

The objects of my journey over the water have not been purely professional. I wished but to see the great anatomists and surgeons a little nearer, to measure them better, and at the same time lead for a little while a life of somewhat greater ease than that to which I had been accustomed. But the old leaven was so strong that I found myself irresistibly drawn to the medical colleges, museums, and hospitals. This has given me an opportunity of making some observations, and I

know that you will expect me to tell you a little of what I have seen. In doing this I shall, as much as possible, avoid making personal allusions to the distinguished members of our profession, who received me with great kindness and attention, for which I think, gentlemen, I must be indebted to you, as they had most of them heard that I had long been in the habit of lecturing to one of the largest classes, if not to the largest single medical class, in the world.

My attention has thus been in a good degree directed to the collegiate institutions and hospitals, and more especially to the manner in which the two great branches of Anatomy and Surgery are there taught, with the hope of rendering myself, by what I might thus observe, more useful to the classes in whose instruction I have the honour to assist.

On as careful a comparison as I could make, it has appeared to me, that however excellent the European system of medical instruction may be for their own students and their own people, the general methods pursued by the best appointed medical institutions of this land are, under all the peculiar circumstances of the country, the best devised that we could adopt.

If I might be allowed to speak dispassionately, I should say, from all that I have seen abroad, that the medical teachers of this country are at least entitled to the great merit arising perhaps from the active competition of schools which have here in general little external support, of devoting themselves energetically to the rendering of their courses not only lucid and well illustrated, but attractive in manner and form. Many of the most distinguished teachers abroad have seemed to me to give their able lessons somewhat coldly; furnishing their classes with the amplest opportunities to

learn, but not inviting them to the effort with the deep personal interest which, in this country, we feel in the success of the class, whose prosperity and fortune make, as it were, a part of those of the institution from whence they proceed.

The students themselves assembled in classes, small when compared with ours, departed themselves in the lecture room like models of propriety, whether listening to the driest details, in uncomfortable amphitheatres, or to the quaint and sprightly lectures of Ricord beneath the lime trees of the hospital yard, rarely leaving their places or in any way embarrassing their instructors.

The complete separation of the profession in Great Britain into different branches is not, I think, an object for our imitation. And, if I am not greatly mistaken, the best minds among themselves not only regard it as an evil, but exhibit a growing desire to make one general degree of Doctor of Medicine, as I believe is the case in every other country, cover all the branches.

The young surgeon, who devotes himself exclusively to the one pursuit, must of necessity, in Europe, where the profession is so rich in distinguished men, wait a weary length of time before he can acquire profitable employment or position,—whilst with us he may almost at once engage in general practice, and the public with some reason expects, that he shall obtain reputation as a medical practitioner, before he shall be believed, to the utmost degree, capable of managing the various complications, which surgical maladies and surgical operations add to the more common affections. The division of either of the branches of medicine and surgery into specialities, a custom which has not been perhaps without some advantages, is, I think, growing daily less in vogue,—the profession coming round to the opi-



nion of Abernethy, that he who best qualifies himself for all the offices of his profession will be found best prepared to undertake any part, while the one who devotes his whole attention but to an isolated portion, is like a person attempting to survey an extensive panorama through a chink. In Great Britain, indeed, the surgeon of honourable rank, as with us, abhors specialities. Continental surgery, on the contrary, except in the hands of such men as Velpeau, Jobert, and Nélaton, is divided into all manner of specialities. It seems to be a French peculiarity, and is exhibited ridiculously enough, even out of the pale of the profession.

In the Boulevard des Italiens, one of the most beautiful and animated of the many charming streets of Paris, between the habitations of a dentist and an aurist, over stores whose single plate glass windows were of the size of an ordinary church door, I observed in large, glittering, golden letters, these two signs,—*spécialité des chemises*, and *spécialité des jupons*,—*specialities of shirts and specialities of petticoats*.

I found every where, in truth, some of the best operators on the eyes, and for calculus, among the general surgeons.

In respect to the methods of treating special and surgical anatomy, I have observed but little variation from the custom in use with us. General anatomy and histology, through the aid of the microscope and the assistance of fine injections, still continue to be favourite pursuits in most of the great capitals of Europe. I had the pleasure of assisting Professor Brücke, of Vienna, and Gerlach, of Hanover, in some minute injections made by their peculiar processes. The former threw in, by the arteries, first, a solution of the ferrocyanide of potassium, following it shortly after with a solution

of the sulphate of iron. The preparation is then soaked for awhile in water, taken out, subsequently dried to the consistence of cheese, and cut into thin slices for the microscope. Gerlach's injection is made of carmine, dissolved by the aid of ammonia in water: it runs very minutely, but is not translucent, and can only be practised with advantage on an animal recently killed. Neither of these injecting fluids ran by any means so minutely as the ether and vermilion injections, introduced into use by Dr. Paul B. Goddard, of this city, and employed extensively by my friend and demonstrator, Dr. E. Wallace.

That of Professor Brücke had, however, this great advantage, that it did not colour the surrounding tissues, and was so translucent as to admit readily the underfalling light. It ran minutely enough to show that, in the healthy state of the eye, the blood-vessels do not run over the cornea, but are reflected back on the conjunctiva in loops, like minute mesenteric arches, and that the formation of pannus or vascular cornea is dependent upon the morbid extension and growth of new vessels from these loops,—a simple anatomical fact, but which the skilful surgeon knows how to turn to profit in the incisions which he makes for these affections, through the conjunctiva at the margin of the cornea.

The same distinguished gentleman was engaged in some researches into the lymphatic fluid, which was obtained from the dog. Two drachms of laudanum were thrown into a vein of one of its legs, which produced perfect stupefaction. The skin of the neck was then opened, and a small metallic pipe introduced into an absorbent vessel, from which an ounce of lymph was in a little while collected. This dog moaned a little,

but was nearly motionless; while another was moving about the room wistfully, and with a sort of semi-consciousness of the fact, that he was only waiting his turn.

Pathological anatomy is taught in Europe more elaborately, perhaps, but much in manner as with us, both in the regular courses, and by the exhibition of recent preparations in the cliniques and hospitals. In the great hospital at Vienna, where every one that dies, is by law, subject to pathological dissection, the examination is conducted with the most thorough and formal precision; it is under the supervision of one, who having no concern in the treatment, may be regarded as a calm and dispassionate observer, the world-renowned Prof. Rokitsky, the most experienced of living pathologists.

There seemed to me a dread formality in the manner in which the dissection, the same in all cases, was made, and the general narrative of lesions noted down, as if the form might overlay the essence, and I could not at times refrain from putting a startling question, which seemed to me of some significance, in respect to the exact lesion of which the patients had died. Through the characteristic kindness of this distinguished pathologist, I assisted several mornings in succession at his examinations, and spent some hours with him in viewing his immense and valuable pathological museum.

I have seen, of course, in the surgery that I have witnessed, much that was not new to me, and a good deal that I thought not superior to what is common to the best practitioners among us. To what I have seen, strange and novel, I shall have occasion to make fuller mention during our winter cliniques.

In the treatment of calculous, prostatic and analogous diseases, though I have sought it diligently in Great



Britain, in the wards of Civiale, and others, in Paris, in Vienna and Berlin, I have found little new to add to our previous stock of information.

In plastic surgery, of which I have witnessed a good deal, the chief novelty I have observed has been an improvement in the process of Von Ammon for the restoration of the lower lid. This consists in the excision of a portion of the integument of the upper lid, to which the edge of the new lid is allowed to form a temporary union, to keep itself smoothly extended, and at a proper elevation. The removal of hemorrhoidal tumours I have seen many times successfully made by the skilful Jobert de Lamballe, with Vienna paste within a metallic capsule placed to protect the soft parts,—and by M. Chassaignac, with his new instrument entitled the *écraseur*. This singular and very powerful machine, I shall show you in its last modification, in which I believe it is brought up to the highest degree of perfection of which it is susceptible. It divides, by a slow and continuous pressure, all the parts embraced in the chain loop, and has been employed by various surgeons, not only for those affections, but for the removal of tumours of nearly every description, including the female breast, and it is even said for amputation of the leg. The slow, bruising division it makes, is commonly attended by little or no hemorrhage, even when large vessels are cut. In the course of the session we shall be enabled, I trust, to form an estimate of its value, which I am disposed to consider not yet fully determined.

The resection of diseased bones, as an alternative in cases so commonly subjected to amputation, is one of the most prominent features of modern surgery, and attracted much of my attention. In resection, especially of the upper jaw, the surgeons of Paris employ the chain

saw very generally, in cases where, both in this country and Great Britain we have found the strong cutting forceps more convenient and expeditious. I saw several resections of the joints of the upper extremities in carious affections, made after the usual manner, and found the experienced members of the profession decidedly favourable to the practice in well selected cases. In regard to that of the wrist joint, I am inclined to believe it is with us too much neglected; for the preservation of the use of the fingers, even with a stiff and anchylosed joint, is a thousand fold more desirable than the best substitute that has yet been produced.

In reference to the resection of the knee joint, which has been latterly so much practised in Europe, there is the greatest difference of opinion. Mr. Bowman, of London, did me the great kindness to take me with him to an operation of this sort on a private patient, a young woman of about twenty-five years of age, who was in all respects a favourable subject for it.

The joint was opened in the ordinary manner by two longitudinal incisions on the sides, crossed in front by a cut through the patellar tendon. The ligaments were divided close to the bones, and an inch and a half on the side of the femur, and an inch on that of the tibia, removed with the saw. There was little bleeding, and few vessels required to be tied. The wound was lightly dressed, and the limb well supported in a splint.

It is impossible that the operation could have been better done. On a subsequent visit, four months and a half afterwards, I was informed by Mr. Bowman, that the case had not done well, no bony union having taken place.

Mr. Ferguson, at one of whose clinics I was present by invitation, and who accompanied me round the wards

of his hospital, showed me two cases in which he had operated, and both seemed doing well—one indeed was cured, firm anchylosis having taken place, and the patient, by the aid of a stick, was stalking freely about the wards. But he has lost one patient out of seven, and failed in one more to obtain bony union or preserve a useful limb. Mr. Stanley exhibited a case at St. Bartholomew's, on which he had previously operated, by taking away a very thin slice only from the ends of the femur and tibia, and the result seemed most unpromising.

Dr. Wilts, of the new, magnificent Bethany hospital of Berlin, showed to me two cases he had operated on, one of which certainly could be deemed perfectly successful.

Professor Langenbeck had five times performed the operation, and lost, if I remember rightly, through pyæmic fever, three cases out of the five—a result less favourable than he had met with in amputation of the hip-joint for gun-shot injuries.

Professor Schuh of Berlin, had had about similar success, and neither of these great surgeons was very favourably impressed with the policy of the operation.

The great professional weight of Mr. Lawrence, and Sir B. C. Brodie, was thrown against it, believing, as the former told me, that the cases most favourable for excision, were also those most appropriate for amputation. I dwell, gentlemen, somewhat, even now, on this most interesting surgical topic, as it is one always of a question between amputation and deformity, and the possibility of a cure, with the preservation of the natural limb; and you can well conceive how thorough the knowledge of the surgeon ought to be, to enable him, in such cases, to determine conscientiously and rightly,

which of the alternatives ought to be urged upon the suffering patient.

The greatest danger to be apprehended in these cases, is the development of pyæmic fever.

Have we any means by which we can protect the patient against the onset of this fever, which is so surely fatal?

The fertile mind of Professor Simpson, of Edinburgh, on account of the good effect observed from renal purgation in erysipelas and puerperal poisoning by the tincture of the chloride of iron, has suggested the use of this article, for two or three weeks prior to a severe surgical operation, as a prophylactic against pyæmia, and I learned from a respectable Edinburgh surgeon, who had made some trials of it, that it had seemed to answer well. Professor Simpson is not a general surgeon, but I have so often, in the course of my life, received most valuable surgical suggestions from similar great professional minds not particularly devoted to that branch, that I am disposed to attach a value to the proposition.

I had on another occasion an opportunity of witnessing, at St. Bartholomew's hospital, a most interesting surgical operation by Mr. Stanley, for the removal of a piece of necrosed bone from the back part of the articular surface of the femur, in a partially ankylosed knee-joint.

The patient was a young woman, who, before puberty, had suffered with a scrofulous affection of the knee, and, in consequence, the limb was not developed like the other either in length or thickness. The joint was fixed in a slightly flexed position, with an ulcerated opening in the ham discharging matter.

A free incision was made upon one side of the joint, cross cut at the ends, so that flaps could be turned up

to expose the bone, and a piece of dead bone about the size of an almond was removed with the forceps.—With the gouge and forceps other suspicious portions were taken away.

Mr. Stanley remarked, that in all probability the removal of the dead portion of bone alone, would have sufficed, but in the uncertainty it was deemed best to make the extirpation more thorough. He mentioned, in support of this opinion, the case of a gentleman who had injured his knee on the field, at the day of the great battle of Waterloo. The joint since that period had been subject to repeated inflammation and swelling, till the consequent suffering began to tell upon the constitution, so as to cause the gentleman to insist upon the removal of the limb. Amputation was practised above the knee, and recovery followed. The joint was not disorganized, a dead piece of bone the size of a hazelnut, was found lying loose in the head of the tibia, and this excellent surgeon believed, if it had been removed with the trephine, that the limb might have been saved.

Besides witnessing some surgical operations by the skilful hand of Mr. Lawrence, I accompanied, several times, that distinguished gentleman around his wards at St. Bartholomew, and must call your attention to one case, which I trust the weight of so great a name will cause you to remember. It was a huge fungoid tumour of the cheek in an old woman, which had closed up the eye, rendering her hideous, and had for six years, under mild treatment, remained about the same, and would not probably destroy her for many more. He believed, if it had been removed by an operation, it would not have been better for the patient. A French surgeon, to whom he showed the patient's tumour, pronounced it a fine case for the extirpation of the upper



maxillary bone. "So it is," said this wise surgeon, "but suppose that it was your fate to suffer such a thing, would you have the operation done?" "Ah," with a shrug was the rejoinder: "that is quite another thing." Here we observe a conscientious application of a test, that it behooves surgeons in general to make, perhaps oftener than they do. We know too well, however, that there is also a risk of erring on the side which seems at least to be the most humane, the surgeon sinning, at times, by allowing the fatal ravages of a disease to progress, which is susceptible of relief by operation.

The whole subject of the treatment of cancerous tumours in various parts of the body by extirpation is one of the deepest practical interest. I saw them removed, and especially cancers of the female breast, by many of the best surgeons of Europe, and was pleased to find, as it so completely coincided with my own experience, that the practice was to be regarded not only as a mode of alleviating suffering and prolonging life, but frequently as the means of effecting a radical cure.

The excision of the nervous trunks of the two maxillary branches of the 5th pair, in cases of *tic douloureux*, I have for years abandoned through the failure to effect permanent relief. I am disposed, however, from what I have learned of the success of Mr. Syme, and especially of Professor Schuh of Vienna, a high-minded and admirable surgeon, to take the subject again into deep consideration. The thoroughness of the manner in which the latter gentleman makes the extirpation, if it be practised at all, should be the model for imitation; to wit, the opening up of the infraorbital canal, and the trephining of the ramus of the lower jaw, so as to reach a large portion of the respective trunks.

In the local neuralgic pains occasionally met with

in other parts, Professor Simpson has found, when the ordinary measures fail, perfect relief at times afforded by the injection under the skin of twenty-eight to thirty drops of the solution of bimeconate of morphia, with the instrument of Dr. Wood of Edinburgh. The injection of this anodyne, is attended temporarily with symptoms analogous to intoxication, rendering it difficult, I should think, to determine whether the relief arose from the local action of the fluid, or by its influence on the nervous centres.

In respect to the treatment of fractures and dislocations, I have observed little new wherewith to occupy you. The long straight splint for fractures of the thigh, has justly displaced, in most of the hospitals of Europe, the double inclined plane of Percival Pott,—there being in London, as I learned from Professor Paget, but a single hospital where the use of the latter, as the general rule, can be observed at all. Many of my professional brethren know the extreme dislike, that I have long entertained towards the clumsy fracture box so commonly in use, and which I have not for years employed in my private practice. My objection to its use has been that the lower end of the fractured limb, solidly fixed in the box, could not turn or descend or rise with the body; every restless twist, or delirious start, or automatic movement in slumber, causing a grinding of the fractured surfaces together, and a consequent increase of inflammation and swelling at the place of injury. It was, therefore, with great pleasure that I found Professor Paget and others supporting the same views. In the wards of the latter gentleman, I was shown a neat apparatus, which seemed to fulfil well the proper indication of treatment. It was a light box, in which the limb was slung according to the principles of Mayor, and its whole weight suspended by cords on a wheel

moving freely up and down, with the slightest motion of the patient, on a little railroad at the top. In many parts of the continent, the immovable apparatus, now made most usually with the gypsum bandage, seems, and in some cases, perhaps, where it should not, to have supplanted every other kind of splint in fractures of the limbs.

The somewhat novel subject of the removal of goitrous cysts, by an enucleating operation, as practised by M. Luigi Porta of Pavia, led me, in consequence of my having twice followed his example with success, to inquire as to the estimation in which it was held by the surgeons of northern Italy. I found opinions much divided on the subject; the risk of attendant hemorrhage being felt as the principal objection.

Goitrous disease and occasional cretinism, we see even in our land, not in our mountain valleys alone, but even in our large cities. But Switzerland and Savoy are especially their home, and the places for the investigation of the various causes, which are supposed to produce them. Goître and cretinism are not necessarily conjoined in the same person, but they are found in the same sort of subject, and in the same localities, and originate from some deep common cause of nutritive depravation, like scrofula. You do not meet these affections on the high hills of Switzerland, where the bracing mountain air is redolent with the sweet Flora of the Alps. I passed by Muraine, the highest city in Europe, seated on a mountain slope, below and in front of the lofty Jungfrau, and learned both from observation and inquiry, that neither disease had ever prevailed among its native inhabitants.

It is in the narrow valleys that they are met with, where small flats are withdrawn between the edges of



mountains that rise precipitately on either side. Here we find small habitations or chalets, with but one story, and that half sunk in the sloping ground; with small windows and imperfect ventilation; enclosing often with the family a cow, an ass, and a pig; placed on the alluvial greensward, which is perpetually moistened by the mountain springs, and in summer heated highly with the reflection of the sun from the gray mountain-sides; the inhabitants forced, from the stony character of the ground beneath the alluvion, to drink of the streams that come from the dissolving feet of the glaciers, which I found always in the Tyrol, in the Bernese Oberland, and about Mont Blanc, white, turbid and disagreeable to the taste. A small fenced garden, rejoicing in a patch of potatoes, cabbages, and the field pea, and a flitch of rusty bacon hanging beneath the eaves of their log huts, convey an accurate idea of the coarseness of the nutriment upon which these poor ignorant inhabitants are known to subsist. Can one conceive any condition of life better fitted for the production of cachexia, and general depravation both of mind and body. No wonder, then, that one meets so often, in those solitary valleys, children seeming old far beyond their years, stunted in their growth, upset as it were, crooked-backed, bandy-legged, and pot-bellied; and, when they grow older, seen so often as grinning cretins by the road-side, sometimes with and sometimes without, the goitrous decoration of the neck.

I have had the pleasure of witnessing much ophthalmic surgery in various places during my short sojourn abroad, and especially in the practice of Messrs. Sichel, Desmarres, Jäger, and Von Graefe. In the diagnosis of the different internal diseases of the eyeball, a considerable advance has been made by the use of the

ophthalmoscope. As the eye is an organ filled with transparent fluids, and provided with a window in front, it is somewhat surprising, that the idea of concentrating rays of light into its interior, so as to have a magnified view of the parts within, had not earlier been practised. The condition of the lens, and of the vitreous humour, of the bulbus opticus, the choroid and retina, can be readily determined by practice with this instrument.

In the very important and delicate operation for the removal of hard cataract, there is nearly as great a diversity in regard to the mode, among the surgeons abroad; as with us. I have seen cases couched as the general rule in Italy, after the old manner of Scarpa; couched, but much more frequently extracted in Paris; both reclined and extracted in Vienna; and, as the ordinary rule, extracted in Berlin and Great Britain—and, according to the statements given, with about equal success in all.

Soft cataracts are treated commonly, as with us, by division with the needle, introduced by the sclerotic coat or the cornea. But in cases where the soft cataract is without a hardened nucleus, Von Graefe, of Berlin, and Desmarres of Paris, resort frequently to the method of linear extraction. This consists in making a good-sized puncture into the cornea, rupturing the capsule, and with a gentle pressure of the finger upon the lid, forcing the fluid lens out through the corneal cut. Indeed the choice of the surgeon as to the form of operation, seemed in many cases to depend upon the peculiar dexterity with which he could perform the one or the other. And those who were equally dexterous with all, as every ophthalmologist should be, wisely in cases of hard cataract displaced or extracted according to the age of patient, the size of the anterior chamber and the prominence of the ball, finding that it requires fully as much

skill to couch or displace a cataract in the best manner as to extract it. After some inquiry as to the results of these different modes of operation, I have returned none the less confident, that the new operation for the removal of firm cataract by lateral displacement, such as I have practised largely in private, and exhibited here to my class for many years, has in its results nothing to lose by comparison. In the division of the cornea by the upper section, the one now mainly practised in extraction, Desmarres cuts a small flap at the same time out of the conjunctiva, a plan pursued likewise by Alexander, of London, and Riberi, of Turin.

The very ready union which ensues between the divided portions of the conjunctiva, is said to facilitate greatly the healing of the corneal section, and the consequent preservation of the ball. Since my return I have four times tested this method in my practice, and found it to answer well.

There is, as you know, an ugly eversion and prominence of the ball of the eye, sometimes consequent upon a badly performed operation for ordinary strabismus. This I have often succeeded in relieving by the operation of Dieffenbach, cutting the tendons on the side of the eversion, and fastening a thread upon its stump, by which the ball could be held firmly drawn inwards. Von Graefe in addition to this, divides the internal rectus and dissects it loose from its sheath, so that it may acquire a new attachment, more in advance upon the ball.

In the blepharospasmus of children, attendant upon scrofulous ophthalmia, the same distinguished gentleman produces a voluntary opening of the lids by a new baptizing process. Many a little tottling manakin have I seen marching up to his knees, his teeth gritted together, and his eyelids closed with a will that lifted up

his cheeks in lumps, and which, by the ordinary methods, would have required much force to separate. Little time was wasted with them. An attendant lifted them up at once by the feet, and immersed the entire face for a few moments in a large basin of cold water. One baptism frequently sufficed; seldom more than two or three were required, to cause their voluntary opening. If at a subsequent visit the little fellows again proved contumacious, the movement of a finger towards the baptismal font, would make their eyes open as with a spring.

The operation for artificial pupil, which we know, when properly done, the eye bears with comparative impunity, I have seen practised under somewhat novel indications—where there was no obliteration of the pupillary orifice—so as to extend it laterally, and form a coloboma, or cat's pupil. To wit, where a firm secondary cataract had occluded one half of the pupil, and the patient was unable to remain in the hospital; where there was a chronic inflammation of the choroid and the iris, which it was said to alleviate by diminishing the internal tension of the ball, and in cases of atrophy of the globe, in which it was alleged the operation gave a new impulse to the nutrition of the organ, by which its form became restored. In regard to the proper value of these rules for operation, I am scarcely prepared to form an opinion. They are, however, entitled to most respectful consideration, as the conclusions deliberately formed by M. Von Graefe, a gentleman inheriting one of the grandest names in surgery, young, rich, and prepossessing, yet devoting himself, to the almost total exclusion of pleasure and amusement, with so much earnestness, intelligence, and success, to the accumula-

tion of experience in his profession, that I would gladly hold him up to you as a bright example for imitation.

I might, gentlemen, with pleasure to myself, were time allowed, occupy you much longer with the narrative of my observations, but I refrain partly on that account, and partly from the fact that I shall have, in the course of the session, ample time for that purpose.

Throughout Europe I found the use of anæsthetic agents, that great blessing to the suffering, for which the old world acknowledges its indebtedness to the new, almost universal among surgeons, and in operations of every grade. The employment of sulphuric ether, after our own free method, seemed but little understood; chloroform was the agent generally employed, partly because it is supposed to act with greater rapidity, and partly from the fact that the person of the surgeon escaped the disagreeable impregnation which ether leaves. It was not, as it appeared to me, however, given in all places with that thorough assurance of impunity, that I had been led to expect. Surgeons usually administered it with their own hands, and I saw many operations performed, where the more powerful agent was not allowed to produce the thorough anæsthetic effect that we always obtain, by a liberal use of the fresh washed sulphuric ether. In London and Edinburgh I found it, however, employed with the fullest freedom, the patients not only being kept thoroughly under its influence during the operation, but sent out of the amphitheatre subsequently, with the pulse feeble, lips and countenance pale, and the head swinging lifelessly like that of a drowned person. No apprehensions seemed to be felt, and the resuscitation was confided to the care of the dressers and nurses.

The patients were, I understood, sometimes half a



day in recovering from its effects, less inclined to vomit, than in cases where ether had been administered, but, if they did, got over the effects more speedily. It was usually administered in two drachm doses at a time, on a napkin held a little above the level of the mouth, to allow for the gravitation of the heavy fluid, and at sufficient distance to admit a free admixture of the air.

I saw it, however, administered frequently by Dr. Snow of London, a gentleman who has written much and ably upon the subject, by the aid of a metallic box supplied with a valve, very analogous in form to the instrument formerly employed in this city in the exhibition of sulphuric ether. This gentleman, who administers it for many other surgeons, told me that he had had one fatality in many thousand cases.

There have, however, in all Great Britain, where it has been given some million of times, been, it is said, about 70 cases of death attributed to it, and I met in London, with some prominent surgeons, who, in view of the greater, nay, entire safety of the ether, were disposed to coincide with me in a preference for that article.

So far as I could observe, there was not any very marked difference between the amount of mental excitement, and convulsive spasms of the limbs, caused by the two anæsthetics—the chloroform, occasionally producing its effects, in a shorter time than is required for the ether.

The strongest advocate of the employment of chloroform is the ingenious deviser of it, Professor Simpson, of Edinburgh, who has employed it more frequently than any other physician, and he says without a single casualty. This may probably be owing not exclusively to the skill of the administrator, but in part to the pu-

rity of the article, which is made there, as I observed on inspecting the place of its manufacture, with great care, and is believed to be entirely free of any poisonous element. If you could have heard this eloquent gentleman discourse upon the subject, however strong might have been your previous prejudices against it, and if you were sure of obtaining the same pure article, you might, like me, have been disposed to reconsider the subject of its employment.

He has administered it, as we have here the ether, successfully in infantile convulsions, keeping children from five to six weeks old, for a fortnight, more or less under its influence; and gave to a lady of rank, while in the puerperal condition, at whose house I made a visit in his company, one hundred ounces of chloroform in the course of thirteen hours, with the effect of preventing the agonizing spasms, which she had suffered in previous labours.

Gentlemen, in my visit abroad, I have missed many of the great names with which I have long had mental association, and have been strongly impressed with the loss the world suffers when a great luminary in science is extinguished.

In Berlin, the places of the elder Graefe and Dieffenbach yet remain in some respects a void. In Paris, of the recent galaxy of great surgeons, Boyer, Larrey, Dupuytren and Roux, Velpeau alone remains, his full head of hair silvered with the touch of time, his steps shortened and inelastic, but yet firm, with an eye undimmed, and mind retaining all its wonted vigour, like an old warrior conscious of a long and victorious career, waiting manfully with harness on, for its close. In Great Britain Mr. Guthrie had just died, and of the historical names of British Surgery, which you have so often heard men-

tioned with reverence from this place, we have yet remaining Mr. William Lawrence, in his youth a house pupil of Abernethy, a surgeon, active, elegant, learned and wise, and that urbane gentleman, the distinguished anatomist, physiologist and surgeon, Sir Benjamin Collins Brodie, who has not written a page, that does not bear the impress of sincerity and truth, or uttered an opinion that is not entitled to the most respectful consideration.

We may justly feel a pride in a profession, which possesses such intrinsic power to interest and charm, as to leave in gentlemen of this stamp, after the realization of every hope, that a laudable ambition could form, an abiding active affection for it.

May they long live, to dispense their wisdom hived in many a studious year, honouring the profession, which they have contributed so much to improve and adorn. The sacredness of private intercourse forbids that I should tell you of the professional zeal and activity which the latter gentleman has allowed me to witness, or of the surgical wisdom that flowed from his lips. I cannot perhaps do better than close this lecture, with his words of counsel, addressed to a young graduate of our college, who like myself was a recipient of repeated kindnesses at his hands. "If you wish, my young friend," said he, "to give breadth to your medical conceptions, and confidence to your hand, if you wish, indeed, to make yourself a great surgeon, let me say to you, as I would to all with whom I have influence, never for a moment cease the cultivation of Anatomical Science."

What can I say to enforce more vividly this wise counsel. It has been the ladder by which he and so many others have reached their elevation. The same means of ascent are open to you all. To inspire you with a steady spirit to mount its steps, to aid and to



cheer you in the ascension, shall be my aim and my effort; and to see you all, or even many of you, progress to the highest round, that has yet been reached, ay, or as may possibly follow, even to surpass us all, would be to me and to every one of my colleagues a source of the deepest pride and gratification.





